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UNITED STATES DEPARTMENT OF AGRICULTURE  
Agricultural Research Administration  
Bureau of Animal Industry  
Washington 25, D. C.

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March 22, 1949

TO PARTICIPANTS IN THE MARCH 15 BRUCELLOSIS CONFERENCE:

There is transmitted herewith proceedings of the conference held March 15 for the purpose of selecting a National Committee for Brucellosis Eradication.

You will note that instead of selecting the National Committee, the conference decided it would be best to designate the organization which should be represented rather than to undertake to name the individuals. Action was taken however on the selection of a Temporary Secretary. Mr. W. D. Knox, Associate Editor, Hoards Dairyman, Fort Atkinson, Wisconsin accepted this position and will make arrangements for a future meeting of those selected by the various groups to make up the committee.

Very truly yours,

*B. T. Simms*

B. T. Simms  
Chief of Bureau

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Enclosure



MINUTES OF MEETING

Brucellosis Conference.

Washington, D. C.

March 15, 1949.

Opening remarks by Dr. B. T. Simms, Chief, Bureau of Animal Industry (see attached paper).

Dr. H. F. Wilkins nominated Dr. R. A. Hendershott as chairman for the meeting,

Judge Montague seconded the nomination, and it was unanimously carried.

"Suggested Responsibilities of the National Advisory Committee for Brucellosis Eradication," by Dr. R. A. Hendershott, Secretary-Treasurer, United States Livestock Sanitary Association (see attached paper).

Dr. Steele: I suggest that you appoint a nominating committee to pick out a list of names for the National Advisory Committee for Brucellosis Eradication, and discuss them before this body.

Motion seconded.

Judge Montague: I would like to ask a question. Would the nominating committee nominate the members?

Dr. Hendershott: As I understand it, the idea is to nominate a committee to suggest names to serve as the National Advisory Committee, those names to be presented back here for the approval of this body. It seems to me that we need a small committee that can meet frequently to act as the Advisory Committee.

Judge Montague: I was making no objection.

Dr. Hendershott: What is your opinion as to such a committee? Do you think it wise or unwise?

Judge Montague: I think with any plan of operation of this kind that you cannot have too large an organization. In working with large committees I know it winds up usually with two or three people



doing the work. The larger it is, the less efficient it is. The smaller it is, the more efficient it is. In a thing of this kind here, you are going to have to be very careful in the selection of a National Advisory Committee. Most advisory committees serve no useful purpose. I have served with several of them during OPA days, and they were not worth a damn for anything in the world. They were used by the Administrator to promulgate some plan of his. When he wanted to get out some regulation, he wanted to get the endorsement of the committee. It would be written up before they got there, and it would be written as something the advisory committee asked for, but in reality they had no part in it at all. If you have a committee, let it operate, don't let it be a tool of the administrator. I remember in the Cattle Advisory Committee we had a man who came to one meeting and refused to come to another, because he said the thing was all written out before he ever got there. If you are going to have such a committee on brucellosis, let it really work, let it function properly, let it not be just window dressing for somebody else. If it is worked that way, I would be very strongly in favor of such a committee. If it is just going to be window dressing, I want no part of it.

\_\_\_\_\_ : The committee should represent livestock procedures, Extension Service, U.S. B.A.I., radio and press people, so that we have a cross-section of this committee represented. Perhaps we need to go on with this committee as it is so constituted now.

\_\_\_\_\_ : It seems to me that any committee that actually is to act must be smaller. It should be chosen by the governing committee of the association.

Dr. R. W. Smith: I agree to a great extent with the Judge here. I think he has put it up to us square and right. It is my opinion that we should have an opportunity to discuss here and get more views. As I gather it, and as I study it, the benefits that could come out of a committee of this kind would be a representation of the groups back home who are on the firing line. Having served as chairman of the National Committee on Brucellosis of the Association for five or six years, I have been in a position at least to hear the arguments presented by official representatives to these hearings. In addition, it would seem to me that if we go on here and form a National Advisory Committee which is made up of representatives of organizations interested in this work, that you would bring what the people back home want to the organization. We have made a good start. We have a national program broad enough for all, and tight enough too, it would seem to me. This appointment of a smaller committee is a big job. I believe it should be done, but just how we are going to do that, how we are going to get a solid, strong committee that will not be a tool, I don't know. However, the "administrator" of this group by and large would be the people in all of the States, and while you can dilly-dally with one or two, it is pretty hard to take States' rights away, even in this day and age. When anyone tells you the administrator of a disease eradication program comes out of any one source in this country, I think they are wrong. We might as well recognize it, and stop beating around the bush--brucellosis is going to be eradicated in this country. Every meeting I have ever attended, nationally and locally, when that question is put to the livestock owner and he alone is allowed to vote on whether or not he wants a control or an eradication program, almost 100 percent vote for eradication.



For me, I am convinced that sooner or later it has got to be licked, and it cannot be licked by any one State or any one group of people working alone. Not that we are all going to agree on some of the minor details, but on the principal points we have got to agree. I am not opposed to this committee--I think it a good idea. I would like to hear some more discussion.

Mr. Shannon: It seems to me this national committee should be a single committee broad enough to represent all the interests. This whole subject of brucellosis comes down to our own health and to that of our family. I think public health should be represented. Then we come over to brucellosis of swine, and that is one thing we seem not to be talking about here today. A lot of our trouble in the human family comes through brucellosis in swine. Are we thinking about getting into brucellosis of swine? It is costing a great deal in doctor bills and human suffering. We speak of expense to the livestock industry. I think it is broader than just cattle.

\_\_\_\_\_ : I agree with the last speaker here, and I recognize the necessity for having a small committee. I am wondering if maybe we might consider that you are going to break it down--a committee on legislation, another committee on human brucellosis, another on swine brucellosis, another on research. If we get this committee too small, you are not going to get the groups to contribute.

Dr. Clark: We seem to be floundering around just how to go about this. I wonder if it would be in order to instruct the various people to divide up into groups--regulatory officials, beef cattle people, press, education, research, etc., with the suggestion that maybe each individual group name their candidate to this over-all committee.



Mr. Arnold: This problem--I am speaking particularly of the Western part of the country--is one which will have to be worked out in conjunction with our State officials. Another thing that we have learned--those of us who are officials in these Western States have learned--that we must work with our cattle men, our stock men, in order to accomplish any job that we set out to do. I am Chairman of the Livestock Sanitary Board in South Dakota--have been for a good many years, and I have a good deal of experience in the control and eradication of disease. I have worked on both sides of the fence. When I was a boy in Wyoming, when they started to eradicate scab, I know the things that went on then. I know we must have the full cooperation of our livestock men to get the job done. We can work with them, educate them, and get the job done. We must not forget that out of 78 million cattle in this country, 54½ million are in the West. We must recognize that the people in the West are entitled to say something about this problem and just how it is to be solved. If it is a proposition of putting up something to the people that they have got to do, that in itself will defeat any program we would like to set up. Brucellosis eradication is a program of education, and one in which the people must feel they are formulating the plan, and that is the way the job must be done. I am not opposed to the control and eradication of livestock disease. I am heartily in favor of disease eradication, but it is a proposition of the approach. Let us work with our people and not command them to do these things.

Dr. Hendershott: I think we have the people here who can stimulate them, and get this material back to the farm people.

Mr. Miller: I want to say that I agree 100 percent with what Mr. Arnold has said. I think we need a public relations committee.

Dr. Hendershott: The motion now stands before the house that the Chair appoint a committee to select committees on various subject matters such as promotion of the program, education, legislation, appropriations, publicity, etc., which committees would get together and give you a report this afternoon.

Mr. Tomson: I was one of the seconds to that motion. I think we are all very much agreed in general on the outline of the plan that has been so ably presented to us by yourself. To me, the crux of the situation is in the consolidation of the ideas and in the establishment of a committee that is capable and sincerely interested in performing the task that it must perform in order to bring about some of the things Mr. Arnold and you have suggested. We are closer to this thing than we have been. One of the features that has contributed to our present problem has resulted from the lack of success that the original brucellosis control and eradication program ran into. With the addition of the four different plans recommended by the U. S. Livestock Sanitary Association and approved by the U. S. Bureau of Animal Industry, we have a program flexible enough to apply to any herd or any operation. I think it is essential that we must recognize differences in climatic conditions, range areas as compared with feeding and dairy sections, etc. If we can consolidate into a smaller group, not excluding the representation that it deserves, we are on the right track.

Mr. Shannon: Apparently I am the only hog here. I realize brucellosis control is in an experimental stage in swine now. I just want to bring this thought to you. It is a critical thing in the swine industry. In Illinois, Indiana, and Iowa, roughly 40 percent of the total farm income comes from swine. We need research and education on brucellosis. That is why the



group that was meeting in Austin, Minn. yesterday sent me to tell you we want to go along. We want education of the swine people. We would like to have anything done that can be done to get brucellosis control in swine advanced to the point it has reached in cattle. We would like to have an opportunity to tell our people what we have, and be a part of the program.

Dr. Hendershott: Thanks very much. I do think that the control of brucellosis in swine is most necessary.

Judge Montague: I did not know you were going to have a general discussion of the whole proposition. As long as you have brought it out and others have discussed it, there is one angle I would like to say a word or two about. That is the program recommended by the U. S. Livestock Sanitary Association, and I do not say it is the only part where people have any serious objection to. I refer to the recommendation that the Congress give the Secretary of Agriculture authority to promulgate and enforce regulations controlling interstate movement of cattle. We are opposed to enlarging the authority of the Secretary of Agriculture above that which he has now. My friend, Dr. Smith, said the States have ample authority within themselves to control the importation of cattle within their own boundaries. We do not need any additional authority. We are opposed to the Federal Government stepping in to control the situation. Let the States themselves handle that. We are opposed to the Secretary of Agriculture being given any greater authority than he now has. Stock men are essentially not only States Righters but local supporters, who believe in individual control and not a centralized autocratic Federal Government. That is the main point of difference between the range people and those who advocate the strong Federal control.



Dr. West: We have been talking education on brucellosis for something like 20 years. We have been talking about voluntary control for all of that time, and a certain section of the livestock industry, mostly made up of importing States, has been advocating, requesting, practically demanding, uniform interstate regulations. Now Judge Montague says every State should adopt regulations as they see fit. How are you going to start on uniformity unless you have somebody leading the way? The U. S. Livestock Sanitary Association in cooperation with the Bureau of Animal Industry are the logical ones to lead the way. In the great record of livestock disease eradication made in this country, we have never got anywhere until we adopted interstate regulations patterned after at least a Federal regulation. The facts are that in all the livestock diseases so successfully controlled or eradicated we had a Federal regulation at the very beginning of the eradication project. We never yet have got anywhere in eradicating a disease unless we had a law which could be enforced after a majority of the cattle owners have started to do the job which required participation by the remainder of the producers. We have been talking education. I don't think there is any disease that the livestock control people have had to contend with that has had as much written about it at the time we started to eradicate it as was the case with brucellosis. We would never have got to first base with the eradication of bovine tuberculosis if we had not had a law requiring the minority to go along after the majority had placed their herds under supervision for eradication of the disease. This is not something new. There has been every opportunity in the world for us to acquaint ourselves with the basic essentials for reaching our goal. The demand is from the livestock industry. The livestock owners now are demanding it. We are

neglecting our duty unless we take the necessary steps to do the job. It is our duty as I see it to take steps to require the necessary legislation which will give us the authority to go ahead and do the job they are asking us to do.

Dr. Smith: The function as I gather it from this gathering is to appoint a national advisory committee for brucellosis eradication, and if we succeed in doing that, that committee should be a working committee. Would it not be the function of that committee to decide whether or not we need legislation?

Mr. Norton: I think that Dr. Smith has the right idea, that this committee should be set up to discuss and consider all of these matters, but I think also that we felt in the tuberculosis eradication campaign that we would not get going until we had a general Federal regulation which brought about more or less uniform regulations all over the country. If we are going to eradicate this disease it has got to be done that way.

Mr. Willoughby: I don't quite know how to approach this question. As you know, Texas is a range State. I am here to represent the Texas and Southwestern Cattle Raisers Association. Why I got on my feet is to concur with Tom Arnold. I think this committee ought to first consider an education program where the percentage of the livestock are that is going to be confronted with the eradication program.

(At this point the subcommittees listed below were named, and it was voted that they meet separately. The assembly was adjourned until 2:00 p.m.)

<u>Subcommittee</u>	<u>Chairman</u>
Education and Extension	William Knox
Legislation	James Steele
Animal Industry	Ray Willoughby
Research	C. A. Manthei
Public Health	Carl Larson



2:00--Conference assembled.

The five sub-committee reports (attached) were read by the chairmen of the sub-committees.

Dr. Wilkins: On brucellosis there has been a lot of work done, there remains much to be done. With the information we now have, if there were adequate appropriations made, you would find much more could be accomplished in the next few years than in all the years before. In order to enlarge on research both the BAI and the various States must be better financed. There are many phases to this brucellosis problem in various sections of the country. We have our range problems, and I do not believe you can sit down here and work out a program for the control of brucellosis that will fit the situations as they exist in Texas and other individual States, and that some of these research problems should be worked out in the field.

Mr. Miller: I think this is a fine idea. I would like to move that this be seconded and action be taken.

Dr. Hendershott: Was it your idea, Mr. Miller, that this group propose a motion to the effect that they go on record as recommending greater appropriation for research in brucellosis?

Mr. Miller: That is correct.

Mr. Arnold: I will second that motion for money; for appropriations for extended research on brucellosis.

Dr. McNutt: I think it should also include State appropriations for extended research.

Mr. Miller: That is correct.

Dr. Hendershott: I think we should bear in mind that this is serious business, that if we are going to resolve that such monies be extended, each of us should take this matter seriously and impress upon the organizations



that we commit them to support national and State legislation for the appropriations of money. It has been moved that this organization go on record as recommending that sums of money be appropriated to the Federal Government for the BAI, and to the States for research in brucellosis in all animal species.

(Motion unanimously carried).

Dr. Hendershott: I think we should have an over-all committee representative of the people of this nation who are most vitally concerned with this brucellosis problem. I would like to propose for your consideration that the following organizations be invited to select a representative of their group to sit on this national committee. I am not entertaining any thought that this committee would supplant the ones that we have here before us today. I do think we need a good working over-all committee that has wide representation from the farm and livestock people of the nation. This disease is a serious matter and its eradication is vitally important to everyone in the nation.

(The following organizations were listed to have one representative on this committee)

Interbreed Dairy Association - or Purebred Dairy Cattle Association  
National Beef Breeders' Association  
American Medical Association  
U. S. Public Health Service  
American Public Health Association  
American National Livestock Association  
U. S. Bureau of Animal Industry  
American Veterinary Medical Association  
United States Livestock Sanitary Association  
The National Grange  
American Farm Bureau Federation  
National Farmers' Union  
Texas and Southwestern Cattle Raisers Association  
American Meat Institute  
National Livestock and Meat Board  
National Association of Swine Records  
National Loss Prevention Board  
National Wool Growers' Association  
Extension Service or Association of Land Grant Colleges

Dr. Hendershott: This committee would be the over-all national advisory committee representing this particular group of people to serve their interests. I would like for this committee to become active and remain active.

(It was unanimously passed that this committee be set up.)

W. D. Knox was selected as acting secretary for this committee.

Judge Montague: What is going to be the position of this committee? Will this committee be recognized by the Government?

Dr. Hendershott: This is what we just threw together ourselves. I rather hoped we would have enough individuals who could raise enough hell on their own.

Judge Montague: But it would have an official recognition?

Dr. Hendershott: Yes it would. The matter of financial support has been brought up here today. Any discussion from the floor?

Dr. Smith: We have gone a long way when we get the representation. I should think we would vote a recommendation to the over-all committee that they promote the ways and means for raising the money and appointing their own secretary.

(The motion was seconded and carried.)

Dr. Hendershott: Is there any part of these various committee reports that you wish to enter into a discussion on?

Dr. Smith: These committee reports have been put together hurriedly. We have indicated our confidence now in an over-all committee that is going to be formed. It would seem to me that the most we could do is to turn over the suggestions that these committees have hurriedly joined together for the committee, with a letter from the temporary secretary setting forth the conditions under which they were drawn up.



Dr. Hendershott: Any other suggestions from the floor?

Dr. Pyles: At this time I would like to ask one question regarding the control of *Brucella abortus* vaccine. I think it should be elaborated just a little.

Dr. Steele: Vaccine is available in many places, and the people are not always getting viable vaccine. We must put out a product that has good immunizing value.

Mr. Knox: I believe it would be somewhat unpatriotic not to accept this headache of acting temporarily as the secretary of the yet informal National Advisory Committee for Brucellosis Eradication for we need about three extra men at Hoard's Dairyman now. I would like to throw out this one comment. I should have made this from the floor. As we hold these meetings, continual reference is made to more money, which is alright, but a lot of this work should be done out in the States. There is no need to designate that all of this work should be done in Beltsville. I am sure that the Federal Bureau of Animal Industry does not want to carry the entire load. There has got to be the desire on the part of the people in the States to go out and tackle these projects. You should go back to your respective States with this resolution if you need it, but accept some of the burden at the State level. There has been a reluctance on the part of most State institutions to tackle some of the livestock disease research projects.

Following the adjournment of this meeting, I would like to have the representatives of the groups named for the over-all committee meet down in front for a conference on the place for the next meeting, etc.



Dr. Hendershott: I feel that we are really on our way to some definite, concrete solution of this problem.

(A unanimous vote of appreciation was made for the way in which Dr. Hendershott conducted the meeting.)

Meeting adjourned.

REVIEW OF PROGRESS MADE WITH REGARD TO BRUCELLOSIS ERADICATION  
SINCE THE MEETING HELD IN MY OFFICE SEPTEMBER 23 AND 24, 1947

B. T. Simms, Chief, Bureau of Animal Industry

Many here today attended the meeting held in my office on September 23 and 24, 1947. Recommendations were made at that meeting which have resulted in a great deal more participation since that time by all interested groups than had taken place during the previous 13 years the brucellosis eradication project was carried on. You of course are aware of the fact that during the first five years of the brucellosis project it was viewed more from the standpoint of a cattle reduction than a disease eradication project.

At the meeting held in September 1947 education was the keynote. It was agreed that more factual information should be given all of the people concerning brucellosis through the farm and daily press, radio, motion pictures, and other sources of factual information.

It was agreed that greater uniformity in procedures for brucellosis eradication should be studied by the United States Livestock Sanitary Association and the Bureau of Animal Industry of the United States Department of Agriculture.

Dr. J. V. Knapp, who was President of the U. S. Livestock Sanitary Association at that time, and myself, appointed a committee of outstanding research workers on brucellosis, including several State livestock sanitary officials from States where the most has been accomplished in brucellosis eradication, to compile a booklet on this disease, which it is hoped will be used as a text by those who do the educational work. There were some at the September 1947 meeting who felt the Bureau should prepare this information. However, since it is well recognized that the Bureau has no monopoly on the available information on brucellosis, it was considered best to have the committee represent more than just the Bureau of Animal Industry. The



Bureau has cooperated in every way possible with the committee who prepared the report. The report of this committee was made at the October meeting of the U. S. Livestock Sanitary Association and will be published by that association in the near future. The Bureau is compiling a new bulletin on brucellosis which will be ready for distribution in the early summer.

In compliance with the request that a study be made of more uniform procedures, I am sure most of you are familiar with the recommendations of the U. S. Livestock Sanitary Association which were made at the December 1947 meeting in Chicago, Illinois. To date, 41 of the States have entered into memorandums of understanding with the Bureau for eradicating brucellosis, based on these recommendations, which were discussed at length in each of the States with livestock organizations and other who will be called upon to assist in placing in operation these recommendations. It was generally agreed that while most of the provisions of these recommendations must be considered as a minimum, not all of the States would be in a position to comply immediately with them, and that some changes would necessarily have to be made.

In June 1948 a meeting was held in Chicago where all interested groups from the 12 Midwestern States met and discussed the brucellosis problem. At this meeting, the Extension Service, which, as we all know, has a closer contact with agricultural interests than any other agency, particularly with regard to disseminating information, participated fully, and has accepted the responsibility of its share of the educational work in connection with the project. Problems such as personnel, and county and State organizational steps were considered, and committee reports made with were approved unanimously by the conference. It was again requested at this meeting that a National Committee for Brucellosis Eradication be set up, and I was requested



to call this meeting which we are holding here today.

At the October 1948 meeting of the U. S. Livestock Sanitary Association, after an opportunity had been given for a study by all of the States and livestock organizations, of the recommendations made in December 1947, a few changes were made, the main one covering the recommendation concerning the percentage of cattle which should be voluntarily placed under supervision before the compulsory provision should be placed in operation. In the 1947 report it was recommended that after 65 percent of the owners representing 51 percent of the cattle had voluntarily placed their herds under supervision, the project should be compulsory. The 1948 report raised these numbers to 75 percent of the owners representing 95 percent of the cattle. In this connection I think you will be interested to know that every report received by the Bureau on this change made in the 1947 report indicates that the percentages used in the 1947 report are more acceptable than those given in the 1948 report.

Let me say in conclusion that, even though 41 of the States have accepted the recommendations of the U. S. Livestock Sanitary Association, which were approved by the Bureau, and many other groups have endorsed provisions similar or identical to these recommendations, all has not been smooth sailing, and there are still rather large segments of our livestock industry who do not approve of the recommendations of the U. S. Livestock Sanitary Association. I believe I am correct in saying that the tendency has been for some who were at first opposed to approve after making further study of the recommendations.

In January of this year a group from the 12 Northwestern States held one of the best brucellosis meetings I have attended. At no time has any group I have met with failed to indicate almost unanimously that eradication

of brucellosis in domestic animals should be the objective, and so long as a majority of those concerned make such demands, the Bureau will employ every facility to accomplish this purpose. Funds made available by the Congress are appropriated on the basis of the disease eradication program, and should there come a time when our brucellosis project becomes a control and not an eradication program, I could not justify requesting that more funds be spent on this project than would be required for research.

That brucellosis can be eradicated no one could successfully question. The selection of a National Committee for Brucellosis Eradication is the purpose for which this meeting has been called, and I can assure you the Bureau will be guided in our efforts in this connection by the recommendations of your committee.

Our part of this job is completed. This is your meeting from here on. I suggest that you nominate and elect a chairman to take charge.



SUGGESTED RESPONSIBILITIES OF THE  
NATIONAL ADVISORY COMMITTEE FOR BRUCELLOSIS ERADICATION  
March 15, 1949

The subject assigned to me is not an easy one. Your reaction when you read on the agenda, "Suggested Responsibilities of the National Advisory Committee for Brucellosis Eradication," could easily prompt the question, "Who is he to tell us what to do?" However, during the many years I have spent on livestock disease eradication, it has been my observation that when a point has been reached that something must be done, those who really make the decisions (and let me say here there are many things we do not know; however, one thing we do know, and that is, we eradicate livestock disease only after those who produce the livestock and those who consume food of animal origin tell us they want it done) frequently say to those of us who are charged with the responsibility of doing the job, "What can we do to help you?" It is with the assumption that you have reached this point in your thinking concerning the brucellosis problem that I accepted the responsibility of presenting this subject to you. Perhaps the first thing that should be discussed is:

Education

We are all aware of the importance of the "Know-How" if we are to make satisfactory progress in any undertaking. In the long and successful record of livestock disease control and eradication made in this country we have never undertaken the task so long as there were still so many conflicting opinions as there are about brucellosis. Considerable disagreement still exists even among those who have been trained in livestock disease eradication--the veterinarians themselves. However, this disagreement never has been so great as many have been led to believe.



When dealing with other livestock diseases, we have always arrived at the one best plan, which in our educational program has been continually kept before the producers. With the cattle fever ticks and scabies the one and only way was to dip the livestock; with foot-and-mouth disease and bovine tuberculosis, the one best plan was to diagnose the disease and then slaughter the infected animals; with hog cholera, black leg and a few others, it has been a case of preventive vaccination. In dealing with brucellosis, there are several methods of approach; the one of choice depending upon the conditions existing in the herd or area. This fact, and the vast differences which exist in the different sections of the country, have made the supposed disagreement between veterinarians more apparent than real.

A booklet has been prepared by a committee appointed by the President of the United States Livestock Sanitary Association and the Chief of the Bureau of Animal Industry on "What is Know About Brucellosis." This publication will be ready for distribution within the next 6 to 10 weeks. The information contained in this booklet has been cleared with the most outstanding research workers on brucellosis, as well as veterinarians who have had remarkable success in their various States in the practical application of control and eradication measures. We are aware, of course, of the rather limited distribution this information would be given without the support of some of you who are represented in this group. You enjoy the confidence of, and the know how of reaching, not only the livestock producers but the consumers as well. Your work has been that of educating the agricultural people through the agricultural press, radio, motion pictures, and other channels; therefore, I feel justified in saying education should be the first objective of the National Advisory Committee for Brucellosis Eradication.

In this matter of education there are many points which should be kept constantly before the people, among them the fact that the livestock industry

sustains an economical loss in excess of 100 million dollars annually due to this disease. This loss can be eliminated at an annual expenditure of considerably less than the loss. The record made in livestock disease eradication should be kept before those who are most concerned as a challenge to their continued leadership in this as well as other fields.

As a result of past accomplishments in livestock disease eradication work, a more ample and wholesome food supply of animal origin has been made available to the people in this country than in any other country, and that at a time when food meant the difference between success or failure between our way of life and those of the countries we are now supplying with a large part of their food. Some years ago when a leading veterinarian attended a veterinary meeting in Europe, he was confronted with this statement, made to him by a European veterinarian: "We do not understand the veterinarians in the United States. In the United States you eradicate disease; in Europe we treat it." This policy perhaps explains better than anything else the reason for the present situation with regard to the availability of food of animal origin.

I also want to quote to you from the statements of a physician who has some following in his home State. The remarks I shall quote were delivered on the State University campus of his home State when he addressed the American Farm Research Association last October:

"Authorities solemnly warn against eating beef and pork from infected animals, but continue to urge that all reactors be shipped promptly to the slaughter house for human consumption. . ."

"All diseased meats should be so branded. All milk from diseased cattle should be labeled on the bottlecap. Much of the 'canned milk' from some factories would be more appropriately labeled 'canned bug juice with milk added.'"

We must educate the people to have faith in the wholesomeness of food of animal origin--that it is the best in any country, and not permit, while



we are disagreeing among ourselves as to the best methods of procedure, one who has no right to speak for the livestock industry to assume leadership in this important field, and to do untold injury to the industry which has contributed so much to our welfare. The statements of this crusader, which are only half-truths, should not cause us to disregard the fact that public health authorities consider brucellosis a public health problem, and that the only source of the disease in man is from domestic animals.

This committee should continue to keep before the public the importance of basic laws and regulations which have been a part of every livestock disease eradication project. We are generally agreed on this, and yet I think many have been reluctant to support the enactment of the necessary laws and regulations. Where would we be with regard to foot-and-mouth disease if there were not adequate laws and regulations for prohibiting shipments into this country of animals and products exposed to or infected with this dread disease? The same consideration should be given the various States with regard to brucellosis, and yet we have been carrying on a brucellosis eradication program at a tremendous expense to the country for the past 15 years, and still we have no national legislation dealing specifically with brucellosis. I should state here in defense of those who have been giving leadership to this project here in Washington that such legislation was introduced in 1939, shortly after the project was begun; however, it was defeated. There will be introduced in the present Congress legislation which, if passed, will provide for the promulgation of basic interstate regulations which should have been a part of the program from the beginning. Such regulations were a part of the control and eradication measures in each of the infectious and contagious diseases of livestock so successfully dealt with in the past. Very naturally, such regulations would have to be worked out on a practical basis in the

interest of serving the industry as a whole. Such regulations would provide in a way a set of standards needed to make it possible to encourage each of the States to work on this project at the same time. We do not eradicate infectious and contagious diseases on the basis of a single herd, or even an area or State-wide plan. Our present methods of continual interchange of livestock and modern transportation make it imperative that only brucellosis-free animals enter the channels of trade for other than slaughter purposes.

Some States have made very remarkable progress in their efforts to control and eradicate brucellosis; and have spent in one or two instances in excess of 10 million dollars; other States with an equal or greater number of animals which are potential carriers of Brucella infection have during the past 15 years spent less than 100 thousand dollars. The States where little has been done will want to continue to ship their cattle to other States, and will insist that this be a matter to be handled by the States concerned. However, this has not worked out well when dealing with other diseases, and because of the nature of the disease cannot work in brucellosis. An interstate regulation would cause the producers in those States to give more consideration to the problem than they are now giving. This statement should not be construed as undertaking to have more regulations than are necessary to control the spread of infectious and contagious disease.

There are also other matters which require national legislation. When we control and eradicate infectious and contagious diseases we have to be well organized. It is necessary to have control over the agents used in the disease eradication project, such as vaccines and diagnostic agents. In the case of brucellosis, all of us know the conflicting factors which arise when we use Brucella vaccine without proper supervision and identification of the



vaccinated animal. I would not have you think I am in any way condemning or thinking of restricting the use of Brucella vaccine, since I believe it is one of the very best weapons we have. I am sure that everyone who wants to use this vaccine in his herd should be permitted to do so. I am sure also that proper controls and supervision will be necessary if we are to obtain maximum results from the use of Brucella vaccine.

There are in the recommendations of the United States Livestock Sanitary Association references to certain basic laws which should be a part of each of the disease eradication projects within the State. I should like to mention only the compulsory provisions and public financing of the project.

I am fully aware of the reluctance to recommend measures which smack of regimentation. However, we should face the fact that in each of the disease eradication projects such measures eventually have been necessary. I am sure that groups such as this have been inclined to be a little too reluctant to make such recommendations. This statement is made because I have met with many producers in my own State and in other States who have said in no uncertain terms, "Let's get the job done. The shortest way is the most economical way in the end." In this connection, I want to quote you from a questionnaire recently sent out to a large group of producers in one of the major feeder States. This was sent out, not by one of us "bureaucrats" but by one of the groups represented here today--to be specific, the American Farm Bureau Federation. Of those replying to the questionnaire:

"90% were in favor of requiring female feeder cattle to be tested before going to farms.

"82% felt that the present quarantines were not effectively enforced.

"85% were in favor of compulsory calf vaccination.

"90% were in favor of branding Bang's disease reactors.

"The highest percentage answering yes on any questions replied to the affirmative on this one. 93% replied they were in favor of requiring all owners in a given area to cooperate for the control of the disease when the majority of the owners in that area were cooperating."

Some of you know the recommendations of the United States Livestock Sanitary Association made in 1947 provided that area Brucellosis work be compulsory when 65 per cent of the owners representing 51 per cent of the cattle had placed their herds under supervision. In deference to the range operators at the meeting in Denver, Colorado, last year, this percentage was changed so that the recommendation now stands that all owners should be required to submit their herds for brucellosis eradication under one of the procedures recommended after 75 per cent of the owners representing 95 per cent of the cattle have placed their herds under supervision. In a brucellosis conference of the twelve Northeastern States, held in New York on January 24 and 25, a group of 34 producers held a separate meeting while this conference was in session and among other recommendations made by this group of producers was one in which they stated that the percentages in the recommendations made at the meeting in Denver were too high, and that such a small percentage of owners should not be permitted to nullify the work of those who are progressive enough to undertake to eradicate the disease in their herds. I have been informed by Dr. Simms that many comments have reached his office since the recommendations made at the Denver meeting, and that the principal point criticized has been this one of raising the percentage to 75 per cent of the owners representing 95 per cent of the cattle, and that in not a single instance has he received a letter defending this change made at the Denver meeting.

There are represented in this group those who can do this important job of education, and can encourage the passage of laws and regulations by both the Congress and the various States.



APPROPRIATIONS

The time has come when we must face squarely each of the problems which confront us, and I have no hesitancy in stating to you that it will take more money to eradicate brucellosis than any disease of livestock we have thus far undertaken to eliminate from our herds. You say, "How much?" Perhaps I can answer it in this way: For the past few years we have been testing approximately 5 million cattle annually and vaccinating approximately 2 million calves annually. There are in round numbers approximately 40 million breeding cows and 10 million calves in this country. We shall have to come a lot nearer taking care of all these animals than we have in the past if the brucellosis eradication project is to succeed. In most sections, one man can take care of 10 to 15 thousand cattle so far as the brucellosis eradication project is concerned, provided he spends his full time on the work and the proper education and organizational work is done prior to his undertaking the task. This would require the employment of at least 4,000 men. There are, as near as I can estimate at the present time, less than 1,000 Bureau and State veterinarians engaged in this project on a full-time basis. It will require, in addition to veterinarians, a rather large number of administrative and clerical personnel. We are skeptical of appropriations being continued year after year when once having been started. If you will investigate the record in livestock disease eradication you will be pleased to learn that when the disease has been eliminated, the appropriation has been reduced or entirely discontinued.

So long as we continue to live with brucellosis we shall have the expense resulting from the loss, as well as the enormous expense of treating and attempting to eliminate the disease on an individual or an area basis.

It is a notable fact that we are unable to accomplish much in dealing with an explosive outbreak of brucellosis, and yet that is precisely the way the disease has been handled for many years, and in many sections is still being given attention only when serious loss confronts the individual owner.

In conclusion, I trust I have not said anything that will cause you to shrink from the problem, great as it is. We do not give up because a problem is difficult. I hope I have mentioned points which you will seriously consider, and I have one more suggestion to make to the committee: The job ahead of you is big enough to necessitate a full-time man on the job. Your committee should have an Executive Secretary who can stay here in Washington and see that you get what you want.

#### Summary

1. A great deal has been accomplished in brucellosis eradication by individual producers and States. Those who have pioneered in the eradication of this serious disease of animals and man are entitled to have the project carried on to a successful conclusion.

2. There is a greater demand on the part of livestock producers and the consuming public for brucellosis eradication than has been apparent for any such project undertaken in the past in this country.

3. It will not be possible to reach the goal of eradication unless the project is actively supported by all agencies concerned.

4. The National Advisory Committee for Brucellosis Eradication should assume their full share of the responsibility for education, legislation and appropriations. The education and legislation should come first. Appropriations made before education and legislation will not accomplish the desired results.





## REPORT OF SUBCOMMITTEE ON EDUCATION AND EXTENSION

We all believe that there was nothing cut and dried when we came here today. The idea, as it originated in Chicago last June, was that we were going to draw on the best minds in the industry to cooperate in the promotion of brucellosis eradication on a nationwide basis. It is the opinion of your education subcommittee that the most important project is that of education and publicity. We speak specifically of producer education rather than consumer education. We do not want to discourage the use of wholesome food products, or to mislead uninformed persons to sponsor scare campaigns concerning brucellosis.

The first recommendation is for the continuance of the over-all advisory committee. We believe that through education, brucellosis can be controlled largely voluntarily, and at a comparatively moderate outlay of public funds. The first project in an educational program should be that of showing the entire industry that we cannot afford to live with brucellosis. Economic and human health factors should be fully explained. We should not endeavor to outline detailed plans for herds. The farmers themselves, with their veterinarians and State officials, will find ways. They will get the job done.

We appreciate that we have available excellent channels for the dissemination of sound information on brucellosis control. In recent years there has been a tremendous growth in the farm radio field. The Radio Farm Directors are anxious to receive reliable information on brucellosis. We could recommend material they might use with confidence. The farm press has a circulation of  $17\frac{1}{2}$  million. Farm magazine editors need the counsel of a group such as this. If our editors had had such counsel a few years ago, there would not be so many erroneous notions among our people today.

Extension Service, through 4-H Clubs and county agents, will be of great value. We must appreciate that they, like many of us, have other interests besides brucellosis control. We know they want to cooperate in disseminating sound information.

We can get assistance from vocational agriculture departments in high schools throughout the country. They have contact with farm young folks every day of the year.

Then, too, you have many opportunities through farm organization meetings and conventions.

It was the unanimous opinion of your subcommittee that it will be necessary to have a fully employed man with secretarial assistance and staff to carry on the work of this group. It has been suggested that it will require at least \$25,000 a year to carry out this work. There should be many sources willing to help finance such a project as this--the meat packing industry, Rockefeller Foundation, Rosenwald Foundation, Sears Foundation, and the National Farm Foundation. We also have the artificial breeding cooperatives, the American Dairy Association, the Purebred Dairy Cattle Association, the large dairy companies, and dairy marketing cooperatives.



Mr. Pollock emphasized in committee meeting that we must have a well-defined 10 or 12 point program outlining the need for this work which we contemplate doing, and how we propose to go about it. This documented outline of the necessity for the work and the plan of action should be ready for presentation to each prospective contributor to our work.

Chairman - W. D. Knox, Associate Editor, Hoard's Dairyman

Ralph L. West, Secretary and Executive Officer  
Minnesota Livestock Sanitary Board

Phil Alampi, Secretary-Treasurer, National  
Association of Radio Farm Directors

E. J. Johnson, Office of Education

R. C. Pollock, Manager, National Livestock and  
Meat Board

J. M. Fry, Extension Committee on Organization  
and Policy

C. D. Lowe, Extension Service

## REPORT OF SUBCOMMITTEE ON LEGISLATION

The recommendations of this subcommittee are brief. While we have not had the time to go into detail, we wanted to explore the three levels of Government to determine what action could be taken.

### County

We do not feel that specific legislation could be enacted on the county level for the control of animal diseases. A probability does exist that the control of milk and dairy products could be enacted on this level. There are two counties in California--Los Angeles and San Diego counties, and counties in Illinois, New York, and Oregon, which have animal disease control programs. There may be other areas that would find it profitable to follow a county disease control program.

### State

On the State level, the subcommittee feels that the following legislation should be enacted:

1. Legislation for the control of sale barn activities. We all realize that the sale barn is an important point from which brucellosis is disseminated in the United States.
2. State legislation that would encourage calfhood vaccination.
3. State-wide pasteurization of all dairy products.
4. Research funds for the State Research Experiment Stations and Universities.
5. Appropriations for education. We are thinking here in terms of the dissemination of information on sanitation, the communicable phase of the disease, and such things as putting out pamphlets, preparing records for local radio stations, the preparation of strip films and motion pictures, also making available extension workers who can talk on brucellosis at local meetings to both farmers and people concerned with animal and human health.
6. The control of the sale of Brucella vaccine. This is very important in the success of the program. Without a good vaccine, which is properly controlled, we are allowing a lot of people to develop a false sense of security.
7. That the State legislatures approve and adopt the United States Livestock Sanitary Association brucellosis control program. The enactment of such a program by the State legislatures is necessary to put a national uniform program into effect.

### National

On a national level, the following recommendations are made:

1. Expansion of research in animal and human diseases, and their relation.



2. Preparation of educational materials and dissemination of knowledge.
3. To allow the Department of Agriculture Bureau of Animal Industry to make employment more attractive for animal disease and control officials. We are all aware of the shortage of veterinarians in the country and the need for them in the Bureau of Animal Industry.
4. We recommend that the National Advisory Committee for Brucellosis Eradication study the need and justification for a national interstate quarantine regulation which is essential for cattle, swine, and other animals.

Chairman - James H. Steele, Chief, Veterinary Public  
Health Division, U. S. Public Health  
Service, Atlanta, Georgia

H. W. Norton, Jr., Executive Secretary,  
Holstein-Friesian Association of America -  
representing Purebred Dairy Cattle Assoc.

Jas. G. Montague, Secretary-Treasurer,  
Texas and Southwestern Cattle Raisers Assoc.

Clinton K. Tomson, Secretary, American  
Shorthorn Breeders Assoc. - representing  
National Beef Breeders Assoc. and National  
Society of Purebred Records Association

R. W. Smith, State Veterinarian, New  
Hampshire - representing U. S. Livestock  
Sanitary Assoc.

## REPORT OF SUBCOMMITTEE ON ANIMAL INDUSTRY

Our report and recommendations are very brief:

To make this campaign function it must be taken to the cattle man, hog man, and goat man in the field. We believe that no over-all program can be drawn up without the cooperation of the producers of commercial and range beef cattle, purebred dairy cattle, swine, and goats.

We recommend that our first efforts be made to promote an energetic program of education, and that proper representation be included in the over-all committee for each of the groups listed above.

Chairman - Ray Willoughby, Texas and Southwestern  
Cattle Raisers Association

Thomas F. Arnold, American National Live-  
stock Association

E. A. Livesay, American Society of Animal  
Production

E. Robert Shannon, National Association  
of Swine Records

W. E. Peterson, American Dairy Science  
Association

R. C. Klussendorf, American Veterinary  
Medical Association

C. F. Clark, Livestock Sanitary Association





## REPORT OF THE SUBCOMMITTEE ON BRUCELLOSIS RESEARCH

1. Collect and supply factual information on brucellosis in man and animals for dissemination to the public.
2. Currently submit new factual information for dissemination.
3. Propose an annual revision of the publication by the United States Live-stock Sanitary Association on "What is Known About Brucellosis."
4. Study the present manuscript on "What is Known About Brucellosis" and assist in the annual revision of this publication.
5. Consult with other investigators engaged in all phases of research on brucellosis.
6. Stimulate fundamental research on brucellosis. We believe it is very essential that the basic facts which serve as the foundation of a more effective control program be constantly enlarged upon. To this end, the subcommittee recommends adequate financial support.
7. Propose a central Public Health Agency similar to the Bureau's Central Antigen Laboratory for the production and distribution of a standard antigen to aid in diagnosing brucellosis in man.
8. Encourage cooperative surveys on the incidence of Brucella infection in man and animals similar to those conducted in Indiana and Minnesota.
9. Formation of a liaison group between the National Advisory Committee and other groups actively engaged in Brucella research.

Chairman - C. A. Manthei, Bureau of Animal Industry  
S. H. McNutt, University of Wisconsin  
M. H. Roepke, University of Minnesota  
B. N. Carle, National Institute of Health



1. The American Medical Association is a non-profit corporation organized for the purpose of promoting the interests of the medical profession and the public health. It was organized in 1847 and has since that time been the leading organization of the medical profession in this country.

2. The Association is composed of members who are physicians and surgeons, and who are elected to the Association by their fellow members. The members of the Association are organized into local, state, and national societies, and each of these societies has the right to elect members to the Association.

3. The Association is organized into several departments, each of which is responsible for a particular branch of the medical profession. These departments are the Department of Internal Medicine, the Department of Surgery, the Department of Obstetrics and Gynecology, the Department of Pediatrics, the Department of Ophthalmology, the Department of Otology and Laryngology, the Department of Dermatology and Syphilology, the Department of Pathology and Bacteriology, the Department of Pharmacology and Therapeutics, and the Department of Legal Medicine.

4. The Association is also organized into several committees, each of which is responsible for a particular branch of the medical profession. These committees are the Committee on Medical Education, the Committee on Medical Research, the Committee on Medical Statistics, the Committee on Medical Jurisprudence, the Committee on Medical Ethics, the Committee on Medical Legislation, the Committee on Medical Economics, the Committee on Medical Social Work, the Committee on Medical Public Health, and the Committee on Medical International Relations.

5. The Association is also organized into several bureaus, each of which is responsible for a particular branch of the medical profession. These bureaus are the Bureau of Medical Education, the Bureau of Medical Research, the Bureau of Medical Statistics, the Bureau of Medical Jurisprudence, the Bureau of Medical Ethics, the Bureau of Medical Legislation, the Bureau of Medical Economics, the Bureau of Medical Social Work, the Bureau of Medical Public Health, and the Bureau of Medical International Relations.

6. The Association is also organized into several sections, each of which is responsible for a particular branch of the medical profession. These sections are the Section of Internal Medicine, the Section of Surgery, the Section of Obstetrics and Gynecology, the Section of Pediatrics, the Section of Ophthalmology, the Section of Otology and Laryngology, the Section of Dermatology and Syphilology, the Section of Pathology and Bacteriology, the Section of Pharmacology and Therapeutics, and the Section of Legal Medicine.

7. The Association is also organized into several divisions, each of which is responsible for a particular branch of the medical profession. These divisions are the Division of Internal Medicine, the Division of Surgery, the Division of Obstetrics and Gynecology, the Division of Pediatrics, the Division of Ophthalmology, the Division of Otology and Laryngology, the Division of Dermatology and Syphilology, the Division of Pathology and Bacteriology, the Division of Pharmacology and Therapeutics, and the Division of Legal Medicine.

8. The Association is also organized into several departments, each of which is responsible for a particular branch of the medical profession. These departments are the Department of Internal Medicine, the Department of Surgery, the Department of Obstetrics and Gynecology, the Department of Pediatrics, the Department of Ophthalmology, the Department of Otology and Laryngology, the Department of Dermatology and Syphilology, the Department of Pathology and Bacteriology, the Department of Pharmacology and Therapeutics, and the Department of Legal Medicine.

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10. The Association is also organized into several bureaus, each of which is responsible for a particular branch of the medical profession. These bureaus are the Bureau of Medical Education, the Bureau of Medical Research, the Bureau of Medical Statistics, the Bureau of Medical Jurisprudence, the Bureau of Medical Ethics, the Bureau of Medical Legislation, the Bureau of Medical Economics, the Bureau of Medical Social Work, the Bureau of Medical Public Health, and the Bureau of Medical International Relations.

## REPORT OF SUBCOMMITTEE ON PUBLIC HEALTH

The problem of human brucellosis is one which stems entirely from the degree of brucellosis which is present among livestock, including cattle, swine, and goats, primarily. So far as human brucellosis is concerned, there is no evidence that human-to-human transmission is of any significant importance. Consequently, we feel that the control of human brucellosis rests primarily upon the Bureau of Animal Industry and upon the veterinary profession. The magnitude of the public health problem is as yet not properly defined, but we do know that certain groups are an especial risk so far as infection is concerned. One group is that which ingests contaminated raw milk, or milk products made from such milk. Another group is the industrial group, which handles infected animals, both from the standpoint of meat packing and disposing of infected carcasses. The last important group is made up of farmers and livestock people who through normal animal husbandry activities are in contact with infected animals. With this in mind, we make the following recommendations:

1. That a unified system directed toward eradication of brucellosis in livestock be implemented on a national scale.
2. That all milk and milk products for human consumption be pasteurized, and that all States and local areas adopt the Public Health Standard Milk Ordinance and Code, which will advise as follows:

Within not to exceed five years after the adoption of this ordinance all milk and milk products for pasteurization shall be from herds certified by the BAI as following one of the procedures approved by the BAI for the eradication of brucellosis. Evidence of this certification shall be filed as directed by the health officer. In the case of milk not for pasteurization all herds and additions thereto shall be tested and found free of brucellosis before any milk therefrom is sold, and such herds shall be retested at least every 12 months thereafter. Said tests and retests shall be made and any reactors disposed of in accordance with the requirements approved by the USDA, BAI, for brucellosis-free accredited areas. A certificate identifying each animal, signed by the veterinarian and the director of the laboratory making the test and filed as directed by the health officer, shall be evidence of the above test.

3. That the importance of *Brucella suis* infection in man be emphasized, and that further attention be given to the problem of eradicating brucellosis in swine.
4. That greater cooperation between livestock sanitary officials and local health departments be established, especially with regard to those diseases which are transmissible between man and animals.



5. Finally, we recommend that cooperative programs attempting to evaluate certain points concerning the incidence of brucellosis in man and animals, such as is being conducted in Indiana as a cooperative program between the Indiana State Board of Health, Purdue University, and the Public Health Service, be continued and extended.

Chairman - Carl L. Larson, U. S. Public Health Service

J. P. Leake, American Public Health Association

Marion Ferguson, American Nurses Association

R. J. Helvig, U. S. Public Health Service

C. K. Mingle, U. S. Bureau of Animal Industry

ATTENDANCE RECORD  
Brucellosis Conference - March 15

Ralph E. Cleland - Chairman, Div. Biol. & Agric. - National Research Council  
LeRoy Voris - Exec. Secy., Food & Nutr. Bd. - National Research Council  
M. R. Clarkson - Insp. & Quarantine Div. U.S. B.A.I.  
Donald Miller - Inspection & Quarantine " "  
Claude A. Smith - " " "  
C. K. Mingle, - Tuberc. Erad. Div., US BAI  
Asa Winter - " " " "  
Howard W. Johnson - Pathological Div. "  
Mrs. Anne Howard Miller - President, D. C. Dietetic Assn.  
Miss Rosemary L. Ladde - representing American " "  
Ames B. Nystrom - Extension Dairyman, USDA (Western States)  
Paul C. Underwood - Bureau of Dairy Industry - Beltsville, Md.  
Wm. E. Peterson - representing American Dairy Science Assn. St. Paul, Minn.  
W. E. Wintermeyer - Extension Dairyman, USDA (Southern States)  
Roy C. Jones - Extension Dairyman, USDA (NE States)  
E. J. Johnson - Vocational Agriculture, U. S. Office of Education, Wash. D. C.  
C. B. Heinemann, Pres. The National Independent Meat Packers Assn. " "  
F. T. Heinemann, Exec. Secy, Nat'l Assn. of Meat Processors & Wholesalers Wash.D.C.  
Marion Ferguson - American Nurses Assn. - New York  
Ella H. McNaughten - Am. Home Economics Assn. Washington  
J. M. Fry - Extension Committee on Organization & Policy - State College, Pa.  
Ray S. Pyles - Veterinarian for State of Kansas - Wichita, Kans.  
W. E. Logan, Topeka, Kansas  
Thos. P. Crispell - Parsons, Kans.  
Thos. F. Arnold - Valentine, Nebr. - Am. Nat'l. Livestock Assn.  
Duval Davidson - Ft. Worth, Tex. - Livestock Sanitary Comm.  
C. E. Fidler - Supt., Div. of Live Stock Ind. State of Illinois  
James H. Steele -USPHS, Atlanta, Ga.  
Birdsall N. Carle - USPHS, Bethesda, Md.  
Carl L. Larson - " " "  
C. F. Clark - Mich. Dept. Agric. Lansing, Mich.  
Jo. G. Montague - Tex. & SW Cattle Raisers Assoc. Fort Worth, Tex.  
Clinton K. Tomson - Stock Yards, Chic. representing National Soc. of Purebred  
Records Assn. and National Beef Breeds  
E. B. Kellogg - Milk Industry Foundation, Wash. D. C.  
C. D. Lowe - Ext. An. Husb., USDA, Wash. D. C.  
H. W. Schoening, Path. Div. USBAI, Wash. D. C.  
Ray W. Willoughby, V.P. Texas-S.W. Cattle Raisers Assn. - San Angelo, Tex.  
John R. Ludwigs, Chief Veterinarian, Livest. Sanitary Comm. of Texas - Fort Worth  
Richard W. Carter - Animal Disease Station of Path. Div. USBAI  
Chester A. Manthei - " " " " "  
Martin H. Roepke, University of Minnesota, St. Paul, Minn.  
Ralph L. West - Minn. Livestock Sanitary Board, St. Paul, Minn.  
R. C. Pollock, Gen. Mgr., National Livestock & Meat Bd. 407 S. Dearborn St. Chic.  
Will J. Miller - Kansas Livestock Sanitary Commission - 909 Harrison St. Topeka  
H. F. Wilkins - State Veterinarian - Helena, Montana  
R. W. Smith - State Veterinarian, Concord, N. H.  
R. C. Klussendorf - AVMA, Chicago, Ill.-  
B. T. Simms, BAI USDA, Wash. D. C.  
E. Robert Shannon - National Assn. of Swine Records.



A. K. Kuttler - USBAI  
Phil Alampi - Sec-Treas. Nat'l. Assn. of Radio Farm Directors  
James P. Leake - M.D. Amer. Public Health Assn.  
Wm. D. Knox, Assoc. Ed. Hoard's Dairyman, Ft. Atkinson, Wisc.  
S. H. McNutt, Madison, Wisc. - rep. Conf. Research Workers in An. Dis. in N. Amer.  
J. M. Harber, Lancaster, Pa., representing the Natl. Livestock Exchange  
Ralph Erskine - BAI Information Div.  
J. K. McClarren - " " "  
Mark Welsh - Lederle Laboratories, Pearl River, N. Y.  
E. A. Livesay, Am. Soc. of Animal Production - Morgantown, W. Va.  
R. J. Helvig, USPHS, Wash. D. C.  
O. E. Reed, Chief, Bureau of Dairy Industry, Wash. D. C.  
H. W. Norton, Jr. - Ex. Secy. Holstein Friesian Assn. of America, rep. The  
Purebred Dairy Cattle Association  
M. H. Brightman - Dairy Industry Committee  
Don Parel - Am. Farm Bureau Federation  
E. Howard Hill - AFBF  
Bill Schaal - BDI, Info. Div.  
L. R. Lownsbury - Am. Guernsey Cattle Club.  
W. B. Kemp - representing E.S.C.O.P. Dir. Ind. Agrl. Exp. Sta.  
J. A. Benson - N. J. DAI Lab. Trenton, N. J.  
Wib Justi - National Grange  
L. Blaine Liljenquist - Western States Meat Packers Assn., Inc.  
Dr. Chas. G. Grey - O.E.S.